

## **Oracle® Revenue Management and Billing**

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## **Self Service Installation and Configuration Guide**

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**Oracle Revenue Management and Billing Self Service Installation and Configuration Guide**

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# Preface

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## About This Document

This document will help you to understand how to install and configure the Oracle Revenue Management and Billing Self Service application. It lists and explains various properties available in the `SelfServiceConfig.properties` file and describes how to override these properties using the `CMSelfServiceConfig.properties` file.

## Intended Audience

This document is intended for the following audience:

- End-Users
- System Administrators
- Consulting Team
- Implementation Team

## Organization of the Document

The information in this document is organized into the following sections:

Section No.	Section Name	Description
Section 1	Installing Oracle Revenue Management and Billing Self Service	Explains how to install the Oracle Revenue Management and Billing Self Service application.
Section 2	Configuring Application Server	Describes how to configure the Oracle Revenue Management and Billing Self Service application on the WebLogic and WebSphere application servers.
Section 3	Configuring Self Service	Explains how to configure the connection to Oracle Revenue Management and Billing. It also lists and describes various properties available in the <code>SelfServiceConfig.properties</code> file and how to override these properties using the <code>CMSelfServiceConfig.properties</code> file.

## Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Self Service User Guide</i>	Provides an overview of the Oracle Revenue Management and Billing Self Service application. It explains the sample pages available in the Self Service application and how to customize these pages as per the customer's requirements.

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# 1. Installing Oracle Revenue Management and Billing Self Service

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The Oracle Revenue Management and Billing Self Service application can be installed on any operating system and application server combination listed in the *Oracle Revenue Management and Billing Installation Guide*.

**Note:** Perl and Java must be installed on the target server as per the requirements of the above combination.

This section explains how to install the Oracle Revenue Management and Billing Self Service application. It includes the following topics:

- Preparing for the Self Service Installation
- Installing Oracle Revenue Management and Billing Self Service

## 1.1 Preparing for the Self Service Installation

The following steps describe how to download and unzip the installation file:

### For UNIX Self Service Installation:

1. Download the Oracle Revenue Management and Billing V2.3.0.1.0 Self Service package from the Oracle Revenue Management and Billing V2.3.0.1.0 media pack which is available on [Oracle Software Delivery Cloud](#). A zip file is downloaded.
2. Unzip the downloaded file. A directory named Web-Self-Service-Unix is extracted. It contains the `Release-SelfService.tar.Z` file.
3. Decompress the file using the following command:

```
tar -xf Release-SelfService.tar.Z
```

A directory named `Release-SelfService` is extracted.

### For Windows Self Service Installation:

1. Download the Oracle Revenue Management and Billing V2.3.0.1.0 Self Service package from the Oracle Revenue Management and Billing V2.3.0.1.0 media pack which is available on [Oracle Software Delivery Cloud](#). A zip file is downloaded.
2. Unzip the downloaded file. A folder named Web-Self-Service-Windows is extracted. It contains the `Release-SelfService.zip` file.
3. Unzip the `Release-SelfService.zip` file using the Winzip or Winrar utility.

A folder named `Release-SelfService` is extracted.

## 1.2 Installing Oracle Revenue Management and Billing Self Service

To install the Oracle Revenue Management and Billing Self Service application:

### For UNIX Self Service Installation:

1. Change to the Release-SelfService directory.
2. Initialize the application environment using the following command:

```
$SPLEBASE/bin/splenvir.sh -e $SPLENIRON
```

Where, \$SPLEBASE is the path where the application environment is installed, and \$SPLENIRON is the name of the application environment for which you want to set the environment variables.

3. Execute the `install` utility using the following command:

```
install.sh -d <Self_Service_Installation_Destination_Directory>
```

**Note:** The Self Service Installation Destination Directory must exist prior to installing the Self Service application. This directory cannot be the same directory where you are conducting the installation.

### For Windows Self Service Installation:

1. Change to the Release-SelfService directory.
2. Initialize the application environment using the following command:

```
%SPLEBASE%\bin\splenvir.cmd -e %SPLENIRON%
```

Where, %SPLEBASE% is the path where the application environment is installed, and %SPLENIRON% is the name of the application environment for which you want to set the environment variables.

3. Execute the `install` utility using the following command:

```
install.cmd -d <Self_Service_Installation_Destination_Directory>
```

**Note:** The Self Service Installation Destination Directory must exist prior to installing the Self Service application. This directory cannot be the same directory where you are conducting the installation.

## Self Service Installation Menu

An interactive screen appears. You must populate each item with your environment values. For example:

```
*****
```

Pick your installation options:

```
*****
```

1. Destination directory name for installation. |spl/WSS
2. Web Server Host. |<Host Name>
3. Web Server Port Number. |8200
4. Mail SMTP Host. |mail.server
5. Top Product Installation directory. |\$SPLEBASE or |%SPLEBASE%

6. Web Application Server Type.

|WLS

7. When WAS: SPLWeb server instance name is required. |server2

P. Process the installation.

Each item in the above list should be configured for a successful installation.

Choose option to configure or (P) to process the installation:

Option (6) is the Web Application Server where the Oracle Revenue Management and Billing environment is running. You can choose one of the following:

- WLS - WebLogic
- WAS - Websphere

Enter Choice (WAS) :

Option (7) is required if you have selected "WAS" in option (6).

When you have specified the installation options, press P to continue with the installation.

**Note:**

You may install the Self Service application on any application server supported by Oracle Revenue Management and Billing.

You must have Java and Perl installed prior to installing the Self Service application.

## 2. Configuring Application Server

---

You can enable Oracle Revenue Management and Billing Self Service on both WebLogic and WebSphere application servers. This section describes how to configure the Self Service application on these application servers.

### 2.1 Configuring WebLogic Application Server

To enable the Self Service application on WebLogic application server, you need to:

1. Set up the Web Application in WebLogic
2. Target Self Service to the Application Server
3. Create a Web User in WebLogic

#### 2.1.1 Setting Up the Web Application in WebLogic

The following are specific instructions for WebLogic. For other application servers with JSP capability, you need to perform similar actions. If you are familiar with a structure of `WebLogic config.xml` file, you may configure the Self Service application by directly editing this file. If you prefer to use WebLogic console, follow the instructions:

1. Start the WebLogic Console: `http://server_url:server_port/console`
2. Within the console, go to the **Deployments** link. You should see a list of applications that probably does not include SelfService. (If it does, it must be the previous version of SelfService. Delete it by clicking the trash can to the right of **SelfService**.)
3. Click **Lock & Edit**, then **Install**. You will then get the **Install Application Assistant** page.
4. You can browse the directories using the console interface and select the `SelfService.ear` that you wish to deploy. Confirm all the defaults.
5. Click **Next** to get the **Choose Targeting Style** page. Select **Install this deployment as an application**.
6. Click **Next** to get the **Optional Settings** page. Keep the default values.
7. Click **Next** and click **Finish**: Review the changes and click **Save**, and then click **Activate Changes**.

Once the changes have been activated you need to start the SelfService module. Go back to the **Summary of Deployments** page. Select the **SelfService** module and start it by clicking **Start**, then selecting **Servicing all requests**.

**Note:** If you apply security patch 10.3.6.0.8 on WebLogic Server 10.3.6, then you must set the **Additional Runtime Classpath** option to `<WebLogic-Installation-Directory>/patch_wls1036/patch_jars/BUG18040640_103608.jar` while defining advanced environment memory options during installation.

#### 2.1.2 Targeting Self Service to the Application Server

If this is the first time you are installing Self Service on this version of Oracle Revenue Management and Billing, you'll have to target the application to the particular application server (there is only one defined, it's called 'myserver').

After targeting the Self Service application to the application server, perform the following steps to ensure that the Self Service application is targeted correctly on the application server:

1. While still in the WebLogic console, click on the **Targets** tab.
2. Make sure the Current Target for SelfService is "myserver".

### 2.1.3 Creating a Web User in WebLogic

While creating a Web user in WebLogic, you need to:

1. Define a user in WebLogic
2. Define a password in WebLogic

#### 2.1.3.1 Defining a User in WebLogic

The Oracle Revenue Management and Billing user is defined in the properties file. For more information on how to override this setting, refer to [Oracle Revenue Management and Billing User ID](#) section.

**Note:** You may choose to define a user other than WEB, if required. However, the user ID for accessing Oracle Revenue Management and Billing must match the user ID for WebLogic.

To define a user in Weblogic:

1. While still in WebLogic console, click **Security Realms** in the Domain Structure tree on the left. Click **myrealm**, and then select the **Users and Groups** tab.
2. Click **New** and create user **WEB** and password **selfservice** (all lowercase, without a space).

**Note:** Ensure that you add the new WEB user to the `cisusers` and `CrossDomainConnectors` user groups.

In addition, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. For more information on how to override this setting, refer to [Authorization String](#) section.

#### 2.1.3.2 Defining a Password in WebLogic

You may choose to define a user ID and password other than WEB and selfservice, if desired. However, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. For more information on how to override this setting, refer to [Authorization String](#) section.

## 2.2 Configuring WebSphere Application Server

To enable the Self Service application on WebSphere application server, you need to:

1. Set up the Web Application in WebSphere
2. Create a Web User in WebSphere

### 2.2.1 Setting Up the Web Application in WebSphere

The following are specific instructions for WebSphere. For other application servers with JSP capability, you need to perform similar actions. If you prefer to use WebSphere console, follow the instructions:

1. Start the WebSphere Console: [https://server\\_url:server\\_port/ibm/console](https://server_url:server_port/ibm/console)

2. From the **Integrated Solutions Console**, select **Applications**, and then **Enterprise Applications**.
3. Select **Install**.
4. Select the location of `SelfService.ear` file and then click **Next**.
5. Leave the defaults as specified, and **Next**.
6. Under **Clusters and Servers** select your server, and then select your Module. Click **Apply**.
7. Click **Next**.
8. On the **Map virtual hosts for Web modules** window, click **Next**.
9. Review the Summary, and click **Finish**.
10. Under **Installing....**, select **Save** when you see Application SelfService installed successfully.

## 2.2.2 Creating a Web User in WebSphere

While creating a Web user in WebSphere, you need to:

1. Define a user in WebSphere
2. Define a password in WebSphere

### 2.2.2.1 Defining a User in WebSphere

To define a user in WebSphere:

1. Select **Applications, Enterprise Applications**.
2. Select **SelfService**.
3. Navigate to **Enterprise Applications, SelfService, Security role to user/group mapping**.
4. Select **cisusers** and click **OK**.
5. Select **WEB**. Then click **OK**.

### 2.2.2.2 Defining a Password in WebSphere

You may choose to define a user ID and password other than WEB and selfservice, if desired. However, the authorization string to be added to the HTTP authorization connection request must be modified in the properties file. For more information on how to override this setting, refer to [Authorization String](#) section.

## 3. Configuring Self Service

This section describes configuration needed to enable a connection to Oracle Revenue Management and Billing. It includes importing the appropriate services for use by XAI, configuration of the properties file and defining settings in Oracle Revenue Management and Billing.

### 3.1 Configuring the Connection to Oracle Revenue Management and Billing

This section describes the steps needed to import the appropriate XAI services needed by the Oracle Revenue Management and Billing Self Service application.

#### 3.1.1 Self Service XAI Services

Self Service XAI services are bundled with the Oracle Revenue Management and Billing application. To enable these XAI services, you must define the following in Oracle Revenue Management and Billing:

- **XAI Adapter** – The following table lists the details that you need to specify while defining XAI adapter named SelfService:

XAI Adapter	XAI Class	Description
SelfService	BASEADA	Web SelfService Adapter

- **XAI Inbound Service** - The following table lists the details that you need to specify while defining XAI inbound service named SSvcCountrySearch:

XAI Inbound Service Name	Adapter	Service Name	Request Schema	Response Schema	Transaction Type	Search Type
SSvcCountrySearch	Base	CILTCNTS	SSvcCountrySearch.xsd	SSvcCountrySearch.xsd	Search	Main

Once you define the XAI Adapter and XAI Inbound Service in Oracle Revenue Management and Billing, you must restart the application server.

#### 3.1.2 Navigate to the Self Service Login Page

Verify that you are able to login to the Self Service Login page using the following URL:

[http://server\\_name:port/SelfService/SSvcController/login](http://server_name:port/SelfService/SSvcController/login)

## 3.2 Configuring Property File

The `SelfServiceConfig.properties` file of the Self Service application contains several properties that may need to be changed for your particular installation.

At installation time, this file was created based on a template and certain parameterized values were overwritten to correspond to appropriate values for your installation.

There are other settings in the configuration file that you may want to modify according to your business needs. You can view the settings in the `SelfServiceConfig.properties` file. However, if

you want to modify the settings, we recommend you to change the settings in the CMSServiceConfig.properties file.

You can access the SelfServiceConfig.properties and CMSServiceConfig.properties files from the WEB-INF directory once you decompress the SelfService.war file (which is available in the package).

**Note:** Comments have a pound sign (#) at the beginning of the line.

### 3.2.1 General Settings

This section describes general settings needed by the system for the Self Service application.

#### 3.2.1.1 URL of XAI Server

The URL of the XAI server has been parameterized for customization at the installation time, and therefore this property is not available in the override properties file. In the SelfServiceConfig.properties file, this property is set in the following manner:

```
com.splwg.selfservice.XAIServerURL=http://localhost:port/XAIApp/xaiserver
```

#### 3.2.1.2 Override Properties File

It is used to specify the name of the override properties file. This value is set to CMSServiceConfig.properties and should not be changed. In the SelfServiceConfig.properties file, this property is set in the following manner:

```
com.splwg.selfservice.OverrideProperties=CMSServiceConfig.properties
```

#### 3.2.1.3 Oracle Revenue Management and Billing User ID

The configuration file defines a user ID of WEB. This is the user that the Oracle Revenue Management and Billing Self Service application uses to access application services in Oracle Revenue Management and Billing. This user ID must correspond with the user ID you defined in WebLogic.

If you defined a user ID other than WEB in WebLogic, you must customize this setting. Find the setting in the CMSServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# User Id in CorDaptix that the Self Service application should assume  
# PARM com.splwg.selfservice.CorDaptixUser=WEB
```

The Oracle Revenue Management and Billing user defined in the file (either WEB or your chosen ID) must be defined in Oracle Revenue Management and Billing. In Oracle Revenue Management and Billing, navigate to **Admin Menu → U → User**.

- Create a new user named WEB (or desired value). Be sure that this new user is added to appropriate user groups so that it has access to all the application services used by the Oracle Revenue Management and Billing Self Service application.
- Make sure to set Account Security for this web user. Since Oracle Revenue Management and Billing Self Service uses the web user ID to connect to Oracle Revenue Management and Billing, you may use this to restrict which accounts can be accessed through Oracle Revenue Management and Billing Self Service.

### 3.2.1.4 Authorization String

The authorization string defines a string to be added to the HTTP authorization connection request. It contains the user ID and password encoded in Base64. The configuration file provides a string with the user WEB and the password selfservice encoded in Base64. This user ID and password must correspond to the settings defined in WebLogic.

If you defined a user ID other than WEB or a password other than selfservice in WebLogic, you must customize this setting. Find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" and provide the appropriate Base64 encoded value.

```
# Authorization string for the XAI Server. This is the WebLogic user &
password in Base64.

# For user WEB, password selfservice the string is:

# PARM com.splwg.selfservice.XAICookie=V0VCOnNlbGZzZXJ2aWNl
```

### 3.2.1.5 Web Person ID Type

When registering for the Self Service application, the customer defines a web login ID. This ID is stored as an entry in the person IDs collection with an appropriate Person ID Type. The configuration file defines the Person ID type to use as WEB. You may choose to use this ID type or you may prefer to set up a different ID type.

To use a person ID type other than WEB, you must customize this setting. Find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Person Identifier Type to be used in CorDaptix for storing the user id
# PARM com.splwg.selfservice.IdType=WEB
```

The person ID type defined in the properties file (either WEB or your chosen ID type) must be defined in Oracle Revenue Management and Billing. In Oracle Revenue Management and Billing, navigate to **Admin Menu → C → Customer Identifier Type**. Add the ID type defined in your configuration file and indicate an appropriate description.

**Note: Format of the Web User ID** - If you would like to impose restrictions on the web user chosen by your customers, you must create an identifier format algorithm. For example, you may want to restrict the web user ID to a minimum number of characters or to require a mixture of alpha and numeric characters.

## 3.2.2 Authentication Plug In Settings

By default, authentication is done by looking up the entered user ID and comparing the entered password with the password stored for this user on the Person table in the Oracle Revenue Management and Billing database.

The configuration file defines special authentication as false and indicates a 'dummy' authentication class.

This authentication algorithm may be overridden by specifying an alternative java class that is used as a plug in. To override the value, find the setting in the `CMSelfServiceConfig.properties` file, and remove "# PARM" to enable the setting.

```
# Whether a class different than the default is performing the authentication
(valid values true, false)

# PARM com.splwg.selfservice.Authentication=false

# Dynamic class name for Authentication

# PARM

com.splwg.selfservice.AuthenticationClassName=com.splwg.selfservice.DummyAuth
entication
```

Set the **Authentication** property to `true`, and set the **AuthenticationClassName** property to an alternative class name. This third-party class needs to implement the `IAuthentication.class` interface found under `SelfService/Web-INF/classes/com/splwg/selfservice`.

### 3.2.3 Oracle Documaker PDF Settings

If the Oracle Documaker bill print software is installed on your system, bills may be displayed in PDF format. If this is the case, the **View** hyperlink is displayed beside the last bill on the account information page.

#### 3.2.3.1 Show Bill Image

The configuration file assumes that you are able to display a bill image using Oracle Documaker. The `ShowBill` setting is defaulted to `true`. If you do not want to display a bill image, you must customize this setting. Find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate `false`.

```
# Whether 'View' should be displayed next to the last bill in the Account
Information screen (valid values true, false)

# PARM com.splwg.selfservice.ShowBill=true
```

#### 3.2.3.2 URL for Online Bill

This setting indicates the server and port number for your Oracle Revenue Management and Billing installation where the bill images may be found. This setting has been parameterized for customization at installation time and is not found in the override properties file.

#### 3.2.3.3 Timeout for Cached Bill PDFs

The configuration file defines the timeout for cached bill PDFs as 60 (minutes). If you want to override this setting, find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Timeout (in minutes) for cached bill PDFs

# PARM com.splwg.selfservice.PDFCacheTimeout=60
```

#### 3.2.3.4 Directory for Cached Bill PDFs

If you choose to define a location for the PDF cache, different from the default temporary directory, find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Directory to be used for cached bill PDFs

# Use this parameter if you want to specify the location for the PDF cache.
```

```
# If it is omitted, the default temporary directory will be used.
# PARM com.splwg.selfservice.PDFCacheLocation=C:\\TEMP
```

### 3.2.4 Customer Contact Settings

Customer Contacts may be created for certain events. (Refer to the table below).

The configuration file defines the class and type as NONE for each event. This means that by default, no customer contact is generated.

The `CMSelfServiceConfig.properties` file defines possible settings for the customer contact class and type that you may choose to use to generate customer contacts. The following table defines the events that may generate a customer contact, along with the suggested values for the class and type for each event.

Event	Description	Property Name	Sample Property Value
Login Success	Customer successfully logged into the Self Service application.	CustomerContactClassLoginSuccess	WEB
		CustomerContactTypeLoginSuccess	LOGIN
Login Failure	Customer attempted to login to the Self Service application, but was not successful.	CustomerContactClassLoginFailure	WEB
		CustomerContactTypeLoginFailure	FAILLOGIN
Registration	The customer registered to use the Self Service application.	CustomerContactClassRegistration	WEB
		CustomerContactTypeRegistration	REGISTER
Received Payment	The customer entered a credit card payment via the Self Service application.	CustomerContactClassPaymentReceived	WEB
		CustomerContactTypePaymentReceived	PAYRCV
Disconnect Service	The customer requested to stop one or more services via the Self Service application.	CustomerContactClassServiceDisconnect	SVC
		CustomerContactTypeServiceDisconnect	STOP
Update Personal Information	The customer updated personal information via the Self Service application.	CustomerContactClassPersonalInfoUpdate	WEB
		CustomerContactTypePersonalInfoUpdate	PERSONALINFO

If you choose to have a customer contact generated for an event, find the setting for the Customer Contact Class and Customer Contact Type for each event in the `CMSelfServiceConfig.properties`

file and remove '#PARM'. If you choose to define a customer contact class/type different than the ones provided, indicate the desired value.

```
# Customer Contact Class in CorDaptix to be used when creating customer contacts for successful logins  
# PARM com.splwg.selfservice.CustomerContactClassLoginSuccess=WEB  
# Customer Contact Type for a successful login  
# PARM com.splwg.selfservice.CustomerContactTypeLoginSuccess=LOGIN  
# Customer Contact Class in CorDaptix to be used when creating customer contacts for failed logins  
# PARM com.splwg.selfservice.CustomerContactClassLoginFailure=WEB  
# Customer Contact Type for a failed login attempt  
# PARM com.splwg.selfservice.CustomerContactTypeLoginFailure=FAILLOGIN  
# Customer Contact Class in CorDaptix to be used when creating customer contacts for registrations  
# PARM com.splwg.selfservice.CustomerContactClassRegistration=WEB  
# Customer Contact Type for a successful registration  
# PARM com.splwg.selfservice.CustomerContactTypeRegistration=REGISTER  
# Customer Contact Class in CorDaptix to be used when creating customer contacts for the update of the personal info  
# PARM com.splwg.selfservice.CustomerContactClassPersonalInfoUpdate=WEB  
# Customer Contact Type for an update of personal info  
# PARM  
  
com.splwg.selfservice.CustomerContactTypePersonalInfoUpdate=PERSONALINFO  
# Customer Contact Class in CorDaptix to be used when creating customer contacts service stops  
# PARM com.splwg.selfservice.CustomerContactClassServiceDisconnect=SVC  
# Customer Contact Type for disconnecting service  
# PARM com.splwg.selfservice.CustomerContactTypeServiceDisconnect=STOP  
# Customer Contact Class in CorDaptix to be used when creating customer contacts for received payments  
# PARM com.splwg.selfservice.CustomerContactClassPaymentReceived=WEB  
# Customer Contact Type for performed payment  
# PARM com.splwg.selfservice.CustomerContactTypePaymentReceived=PAYRCV
```

For each event that you want a customer contact generated for, you must enter a customer contact class and type in Oracle Revenue Management and Billing that corresponds to the value in the properties file.

- Navigate to **Admin Menu → C →Customer Contact Class** in Oracle Revenue Management and Billing. Add one or more class values for your customer contacts.

- Navigate to **Admin Menu → C → Customer Contact Type**. Add a unique customer contact type for each event above, where you would like a customer contact generated. Indicate the desired customer contact class defined in the previous step.

**Note: Error Creating Contact** - If a customer contact cannot be created (e.g. because of incorrect setup of the customer contact class in Oracle Revenue Management and Billing) an error is written to the WebLogic console and a To Do Entry for the Oracle Revenue Management and Billing Self Service administrator is created.

### 3.2.5 To Do Entry Settings

To Do Entries may be created for certain events listed in the table below.

Event	Property Name	Sample Property Value
Administrator Information	AdminToDoType	CI_WSSAD
Stop Service	ServiceStopToDoType	CI_WSSST
Update Personal Information	PersonalInfoToDoType	CI_WSSPE

For the Administration event, the To Do type is defined as shown in the table. The Administration To Do type is used to alert the Oracle Revenue Management and Billing Self Service administrator about a malfunction in the Self Service application as a result of one of the following reasons:

- Error in sending an email to the customer, either during the registration process, from the password change page or from the password reminder page. A reason for failure in sending an email may be a broken connection to the SMTP email server or incorrect definitions in the Oracle Revenue Management and Billing Self Service file.
- Error in attempting to create a customer contact.

If you prefer to define a different To Do type for the administration event, find the setting in the CMSSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# To Do Type for Administrator Information
# PARM com.splwg.selfservice.AdminToDoType=CI_WSSAD
```

The configuration file defines the remaining To Do types as NONE. This means that by default, no To Do entry is generated for those events. If you choose to have a To Do entry generated for an event, find the setting for the To Do type for each event in the CMSSelfServiceConfig.properties file and remove '#PARM'. If you choose to define a To Do type different than the ones provided, indicate the desired value.

```
# To Do Type for Service Stop
# PARM com.splwg.selfservice.ServiceStopToDoType=CI_WSSST
# To Do Type for Update Personal Information
# PARM com.splwg.selfservice.PersonalInfoToDoType=CI_WSSPE
```

The following table identifies the required settings for the To Do entries. If you have decided to use a different To Do Type code, you must define the drill keys and sort keys as shown.

To Do Type	Description	Message Category/Message Number	Drill Down Application Service	Sort Key(s)	Drill Key (Table/Field)
CI_WSSAD	Administrator Information	15/314	CILCPERP (Person)	Error Message	CI_PER/PER_ID
CI_WSSPE	Update Personal Information	15/313	CILCPERP (Person)	Customer Contact ID	CI_PER/PER_ID
CI_WSSST	Stop Service	15/311	CILCSVAP (Service Agreement)	Service Agreement ID	CIS_SA / SA_ID

**Note:**

The sort key and drill key for the administration To Do type are not really used. Values are required for the To Do type definition. The To Do entries are related to technical problems, so a transaction to drill down to is not available.

**Error Creating To Do** - If a To Do entry cannot be created successfully, an error message is written to the application server console.

## 3.2.6 Payment Related Settings

This section describes the settings needed to successfully store a credit card payment in Oracle Revenue Management and Billing via the web.

### 3.2.6.1 Currency

The configuration file defines the currency to use for credit card payments as USD. If this is not the correct currency for your installation, you must customize this setting. Find the setting in the CMSSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Currency code to use for payments
# PARM com.splwg.selfservice.CurrencyCode=USD
```

You must also ensure that the currency code defined (either USD or your override value) has been defined in Oracle Revenue Management and Billing using **Admin Menu → C → Currency**.

### 3.2.6.2 Auto Pay Source Codes

Credit card payments submitted via the web are handled as an automatic payment and must be interfaced to the appropriate external system for card number verification.

In Oracle Revenue Management and Billing, automatic payments must reference a tender type that indicates that the payment is used for auto pay and must reference an appropriate auto pay source code.

**Note:** The tender type and auto pay source codes described here would be used for any situation where a customer has provided a credit card for payment and the information must be sent to the appropriate

credit card company. For example, perhaps a customer calls to provide credit card information for payment. As a result, you may already have appropriate values defined in Oracle Revenue Management and Billing.

Navigate to **Admin Menu → T → Tender Type** in Oracle Revenue Management and Billing. If you do not already have a tender type set up for credit card payments that require authorization, create one. The following table provides an example such an entry.

Tender Type	Description	Generate Auto Pay	External Type	Expiration Date Required
APCC	Auto Pay by Credit Card	Checked	Credit Card Withdrawal	Checked

One or more auto pay source codes are required. The auto pay source code allows you to reference a validation algorithm to validate the credit card number entered. The recommendation is to create a different auto pay source code for each type of credit card (for example, Visa, Master Card, etc) in order to reference the appropriate validation algorithm.

The configuration file defines a separate auto pay source code for the four major types of credit cards: Visa, Master Card, Discover and American Express. For your installation, you may choose to define different values for the auto pay source codes than the ones provided.

- If you choose to use the settings as defined in the configuration file, you must define the corresponding auto pay source codes in Oracle Revenue Management and Billing.
- If you choose to override the values in the configuration file, you must find each setting in the CMSelfServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Auto Pay Source Code for Visa
# PARM com.splwg.selfservice.AutoPay.Visa=VISA
# Auto Pay Source Code for MasterCard
# PARM com.splwg.selfservice.AutoPay.MasterCard=MASTERCARD
# Auto Pay Source Code for Discover
# PARM com.splwg.selfservice.AutoPay.Discover=DISCOVER
# Auto Pay Source Code for AmericanExpress
# PARM com.splwg.selfservice.AutoPay.AmericanExpress=AMEX
```

Navigate to **Admin Menu → A → Auto Pay Source Type** in Oracle Revenue Management and Billing. If you do not already have source codes created for the various credit card types, create them. The following table provides examples.

Auto Pay Source	Description	Tender Type	Route Type	Validation Algorithm
VISA	Visa Card	APCC	ACH	VALID-VISA
MASTERCARD	Master Card	APCC	ACH	VALID-MC
DISCOVER	Discover card	APCC	ACH	VALID-DSC

Auto Pay Source	Description	Tender Type	Route Type	Validation Algorithm
AMEX	American Express	APCC	ACH	VALID-AMEX

Notice that the auto pay source codes all reference the same tender type created above. Also note that the source codes reference the same auto pay route type. Refer to payment documentation for more information about the auto pay route type.

### 3.2.7 Credit Card Validation Class Plug In Settings

By default, the credit card number entered by the customer is not fully validated. It basically checks that the number entered is a valid credit card number for the chosen credit card type. It does not try to contact a credit card company.

To implement a more thorough validation algorithm, indicate and alternative third party Java class. To override these settings, find the setting in the `CMSelfServiceConfig.properties` file, remove "#PARM" to enable the setting.

```
# Whether a class is validating the credit card (valid values true, false)
# PARM com.splwg.selfservice.CreditCardValidation=true
# Dynamic class name for CreditCardValidation
# PARM

com.splwg.selfservice.CreditCardValidationClassName=com.splwg.selfservice.Dum
myCreditCardValidation
```

Modify the `CreditCardValidationClassName` property to specify the third-party class name. This third party class needs to implement the `ICreditCardValidation.class` interface found under `SelfService/Web-Inf/classes/com/splwg/selfservice`.

**Note: Oracle Revenue Management and Billing Validation** - The auto pay source code may reference a validation algorithm to handle credit card validation. This validation is only done when the payment information is sent to Oracle Revenue Management and Billing. Use the credit card validation plug-in spot in the configuration properties to capture an error in the credit card as soon as the user enters a value.

### 3.2.8 Location Settings

The location settings define format settings for display and entry of dates, numbers and phone numbers.

#### 3.2.8.1 Phone Types

The Self Service account and person information pages attempt to display a home and business phone number. Actually, the phone numbers displayed correspond to two phone number types defined in Oracle Revenue Management and Billing for your person phone numbers.

The configuration file defines the phone type for the Home phone number as HOME and defines the phone type for the business phone number as BUSN. If these settings do not correspond with the phone types that you have defined in Oracle Revenue Management and Billing for the person record, you must customize the settings. Find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# CorDaptix phone type used for home phone numbers
# PARM com.splwg.selfservice.PhoneTypeHome=HOME
# CorDaptix phone type used for business phone numbers
# PARM com.splwg.selfservice.PhoneTypeBusiness=BUSN
```

You probably already have the appropriate phone types defined in Oracle Revenue Management and Billing. If not, navigate to **Admin Menu → P → Phone Type**. Add the two phone types defined in your configuration file and indicate an appropriate description.

**Note: Phone Format** - In Oracle Revenue Management and Billing, each phone type references an algorithm to define valid formats for the phone type. One of the valid phone formats defined in the algorithm for the phone types used by the Oracle Revenue Management and Billing Self Service application must be used for the phone format setting.

### 3.2.8.2 Phone Format

The configuration file defines the phone format used for display and entry of a phone number as (999) 999-9999. If this is not appropriate for your installation, you must customize this setting. Find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Phone format used on Update Personal Information screen
# PARM com.splwg.selfservice.PhoneFormat=(999) 999-9999
```

**Note: Valid Format** - This phone format must be a valid format used by the phone format algorithm referenced in Oracle Revenue Management and Billing on your home and business phone types.

### 3.2.8.3 Date Formats

The display format of dates and date/times is specified using the `CorDaptixDateFormat` and `CorDaptixDateTimeFormat` property, respectively. These formats should correspond to the date and time formats defined in the Display Profile for the Oracle Revenue Management and Billing User ID.

To override the formats set in the configuration properties file, find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Date format used to display dates received from XAI
# PARM com.splwg.selfservice.CorDaptixDateFormat=MM-dd-yyyy
# Date-Time format used to display date/times received from XAI
# PARM com.splwg.selfservice.CorDaptixDateTimeFormat=MM-dd-yyyy HH:mm:ss
```

The format used by XAI is determined using the `XAIDateFormat` and `XAIDateTimeFormat` property. These formats should correspond to the default date format and default date/time format defined for your Oracle Revenue Management and Billing XAI Adapter.

Refer to the **Setting Up Your Registry** section in the *XAI Documentation* for more information about defining XAI adapters.

**Note:** It is also possible for each individual Oracle Revenue Management and Billing schema to define date and date/time formats. If that is the case, the schema formats should correspond to the formats defined here.

To override the formats set in the configuration properties file, find the setting in the CMSServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Date format used by XAI (set in XAI Formats control table) for dates sent to XAI
# PARM com.splwg.selfservice.XAIDateFormat=yyyy-MM-dd
# Date-Time format used by XAI (set in XAI Formats control table) for Date/Time sent to XAI
# PARM com.splwg.selfservice.XAIDateTimeFormat=yyyy-MM-dd HH:mm:ss
```

### 3.2.8.4 Amount Formats

The display format for amounts is specified using the property named CorDaptixNumberFormat.

To override the format set in the configuration properties file, find the setting in the CMSServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Number format to be used to display amounts received from XAI (should be identical to the display profile used)
# PARM com.splwg.selfservice.CorDaptixNumberFormat=###,##0.00
```

**Note: Display Profile Setting** - The decimal symbol and group symbol defined here should match the settings defined for the display profile defined for the Oracle Revenue Management and Billing User ID.

The XAI format is specified using the property named XAINumberFormat.

To override the format set in the configuration properties file, find the setting in the CMSServiceConfig.properties file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Number format to be used for Amounts sent to XAI
# PARM com.splwg.selfservice.XAINumberFormat=####0.00
```

## 3.2.9 E-Mail Related Settings

Several functions in the Oracle Revenue Management and Billing Self Service application (registration, password change and reminder) send an email with the user ID and password to the customer.

### 3.2.9.1 Send Email

The configuration file assumes that you want to send emails for the above listed events. If your installation does not want to send email confirmations, you must customize this setting. Find the setting in the CMSServiceConfig.properties file, remove "# PARM" to enable the setting and indicate a value of false.

```
# Whether an email will be sent (should be set to false when no SMTP server can be reached); valid values: true, false
# PARM com.splwg.selfservice.SendEmail=true
```

### 3.2.9.2 Email File Location

Indicates the location of the text file containing the text mailed to the customer, when the customer chooses the transactions Password Change and Password Reminder ('Forgot Password'). This setting has been parameterized for customization at installation time and is not found in the override properties file.

A sample file called `EmailFile.txt`, is located in the `SelfService` directory. The contents of the email may contain the following substitution variables that are replaced at execution time with the User ID or Password. This is done by embedding the following values in the email text file:

- `@user@` - represents the user ID
- `@password@` - represents the password

### 3.2.9.3 Email Subject

This setting defines the subject of the email for password changes and reminders. The configuration file defines this value as Your User and Password. If your installation would prefer a different email subject, find the setting in the `CMSelfServiceConfig.properties` file, remove "#PARM" to enable the setting and indicate the desired value.

```
# Subject of Mail  
# PARM com.splwg.selfservice.EmailSubject=Your User and Password
```

### 3.2.9.4 Registration Email File Location

Indicates the location of the text file containing the text mailed to the customer, when the customer successfully registers as a new user. This setting has been parameterized for customization at installation time and is not found in the override properties file.

### 3.2.9.5 Registration Email Subject

This setting defines the subject of the email for successful registrations. The configuration file defines the subject as Your registered User and Password. If your installation would prefer a different email subject, you must customize this setting, find the setting in the `CMSelfServiceConfig.properties` file, remove "# PARM" to enable the setting and indicate the desired value.

```
# Subject of Registration Mail  
# PARM com.splwg.selfservice.RegistrationEmailSubject=Your registered User  
and Password
```

### 3.2.9.6 SMTP Host

This setting defines your SMTP host name. It has been parameterized for customization at installation time and is not found in the override properties file.

### 3.2.9.7 From Address

This setting defines the sender address appearing on emails to your customers from the Oracle Revenue Management and Billing Self Service application. This setting must be defined in the override properties file.

```
# From Address:  
# PARM com.splwg.selfservice.FromAddress=administrator@company.com
```

**Note: Error Sending Email** - If an email is not sent successfully, a message is written to the application server console and an administration To Do entry is created.

### 3.2.10 Phone Label Related Settings

To change the home phone, business phone or e-mail address labels in the Self Service application, you need to edit the following properties in the `CMSelfServiceConfig.properties` file and remove the prefix "# PARM" to enable the settings.

```
# Customer Info Zone Home Phone Label
# PARM com.splwg.selfservice.CustomerInformationHomePhone=Home Phone
# Customer Info Zone Business Phone Label
# PARM com.splwg.selfservice.CustomerInformationBusinessPhone=Business Phone
# Customer Info Zone Email Address Label
# PARM com.splwg.selfservice.CustomerInformationEmailAddress=Email Address
```

### 3.2.11 Action Settings

This section is needed if your implementers decide to add new pages to the Self Service application. The parameters provided below are samples to show the expected syntax.

```
# The following section allows the dynamic definition of additional actions.
The property name must start with # "com.splwg.selfservice.Action" and after
that it contains the action name. The property value is the class name.

# Following two examples:

# PARM

com.splwg.selfservice.Action.financialhistory=com.splwg.selfservice.AccountFi
nancialHistoryAction

# PARM

com.splwg.selfservice.Action.billinghistory=com.splwg.selfservice.BillingHist
oryAction
```

The property name must start with `com.splwg.selfservice.Action`, followed by the action name. The property value is the class name. For more information, refer to the **Creating an Action Class** section in the *Oracle Revenue Management and Billing Self Service User Guide*.

## 3.3 Customizing Self Service

While customizing the Self Service application, ensure that every file that you create is prefixed with CM (for example, `CMSelfServiceConfig.properties`).

All files prefixed with CM will be preserved during future upgrades of the Self Service application. This will save your time and effort during future upgrades.

For more information on how to customize the Self Service application, refer to the **Customizing Self Service** section in *Oracle Revenue Management and Billing Self Service User Guide*.